ABSTRACT OF THE DISCLOSURE

A power supply of one embodiment of the invention is disclosed that includes a conversion mechanism and a feedback mechanism. The conversion mechanism is to control conversion of a first direct current (DC) signal from to a second DC signal provided to an electronic device by switching the first DC signal to vary the second DC signal. The feedback mechanism is to cause the switching control mechanism to operate in a nominal-power mode or a reduced-power mode according to a control signal received from the electronic device. The conversion mechanism is caused in the reduced-power mode to lessen at least one of the duty cycle and the frequency at which the first DC signal is switched until the voltage of the second DC signal decays to a first voltage level.